

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-24 (cancelled)

25. (Currently Amended) A balloon catheter comprising:

a tubular member having a proximal end and a distal end;

an inflatable balloon disposed at the distal end of the tubular member;

a stent mounted on the inflatable balloon;

a first lumen disposed in the tubular member and in communication with an interior of the inflatable balloon;

a second lumen disposed in the tubular member for receiving a guidewire substantially along its entire length, the second lumen having a first opening at the proximal end of the tubular member and a second opening at the distal end of the tubular member;

a first slit disposed longitudinally from the first opening along the tubular member to permit separation of the guidewire with respect to the second lumen

an adapter disposed at the proximal end of said tubular member; and

an adapter slit disposed in said adapter to permit separation of the guidewire from the adapter, said adapter slit

being narrower than an outside diameter of the guidewire, said adapter slit being straight from a proximal end of the catheter to a distal end of the adapter.

Claim 26 (original) The balloon catheter defined in claim 25, wherein the first slit extends from the first opening to an area on the tubular member which is proximal to the inflatable balloon.

Claim 27 (original) The balloon catheter defined in claim 25, wherein the slit extends from the first opening to the second opening.

Claim 28 (original) The balloon catheter defined in claim 25, wherein the inflatable balloon comprises a second slit in substantial alignment with the first slit.

Claim 29 (cancelled)

Claim 30 (original) The balloon catheter defined in claim 25, further comprising a third lumen for receiving a stiffening member.

Claim 31 (original) The balloon dilation catheter defined in claim 30, further comprising the stiffening member disposed in the third lumen.

Claim 32 (cancelled)

Claim 33 (original) The balloon catheter defined in claim 31, wherein the stiffening member comprises a metal wire.

Claim 34 (original) The balloon catheter defined in claim 25, wherein the first lumen and the second lumen each comprise a passageway having a substantially circular cross-section disposed in a substantially solid tubular member.

Claim 35 (original) The balloon catheter defined in claim 25, further comprising at least one radioopaque marker disposed on the tubular member

Claim 36 (original) The balloon catheter defined in claim 25, wherein the tubular member is constructed from plastic material having various density to provide a decreasing stiffness from the proximal end to the distal end.

37. (New) The balloon catheter defined in claim 25, wherein said adapter slit consists of a straight slit throughout the length of said adapter.

38. (New) A balloon catheter comprising:

- a tube having a proximal end and a distal end;
- a balloon disposed at the distal end of the tube;
- a stent mounted on the balloon;
- a first lumen disposed in the tube and in communication with an interior of the balloon;
- a second lumen disposed in the tube configured for receiving a guidewire along the length of the second lumen, the second lumen having a first opening at the proximal end of the tube and a second opening at the distal end of the tube;
- a first slit disposed longitudinally from the first opening along the tube member to permit separation of the guidewire from the second lumen through the first slit;
- an adapter connected to the proximal end of said tube;

and

- an adapter slit disposed in said adapter to permit separation of the guidewire from the adapter through the adapter slit, said adapter comprising a straight slit throughout the entire length of said adapter from a proximal end of the catheter to a distal end of the adapter.

39. (New) The balloon catheter defined in claim 38, wherein said adapter slit is narrower than an outside diameter of the guidewire.

40. (New) The balloon catheter defined in claim 39, wherein said adapter slit is as narrower as said first slit.

41. (New) The balloon catheter defined in claim 39, wherein, wherein the balloon has a second slit in substantial alignment with the first slit.

42. (New) The balloon catheter defined in claim 39, wherein, wherein the tube is constructed from plastic material having various densities to provide a decreasing stiffness from the proximal end to the distal end.

43. (New) The balloon catheter defined in claim 39, wherein said first slit extends from the first opening along the length of the tube to a location proximal the balloon.

44. (New) A stent-mounted balloon catheter comprising:

- a tube having a proximal end and a distal end;
- a balloon disposed at the distal end of the tube;
- a stent mounted on the balloon;

a first lumen disposed in the tube and in communication with an interior of the balloon;

a second lumen disposed in the tube configured for receiving a guidewire along the length of the second lumen, the second lumen having a first opening at the proximal end of the tube and a second opening at the distal end of the tube;

a first slit disposed longitudinally from the first opening along the tube member to permit separation of the guidewire from the second lumen through the first slit;

an adapter connected to the proximal end of said tube;

an adapter slit disposed in said adapter to permit separation of the guidewire from the adapter, said adapter slit being narrower than an outside diameter of the guidewire, said adapter slit comprising a straight slit; and

a third lumen disposed in said tube between the first and second lumens, a stiffening member being disposed in at least a portion of said third lumen.

45. (New) The balloon catheter defined in claim 39, wherein said adapter comprises:

a guidewire branch; and

an inflation branched angled with respect to said guidewire branch.

46. (New) The balloon catheter defined in claim 39, wherein said adapter has at least two sections with different diameters.

47. (New) A balloon catheter comprising:

- a tubular member having a proximal end and a distal end;
- an inflatable balloon disposed at the distal end of the tubular member;
- a stent mounted on the inflatable balloon;
- a first lumen disposed in the tubular member and in communication with an interior of the inflatable balloon;
- a second lumen disposed in the tubular member for receiving a guidewire along at least a portion of its length, the second lumen having a first opening at the proximal end of the tubular member and a second opening at the distal end of the tubular member;
- an adapter disposed at the proximal end of said tubular member; and
- an adapter slit disposed in said adapter to permit separation of the guidewire from the adapter, said adapter slit being narrower than an outside diameter of the guidewire throughout the entire length of the adapter, said adapter slit comprising a straight slit from a proximal end of the catheter to a distal end of the adapter.

48. (New) The balloon catheter defined in claim 47, wherein said adapter slit is as narrower as said first slit.

49. (New) The balloon catheter defined in claim 47, wherein the inflatable balloon has a second slit in substantial alignment with the first slit.

50. (New) The balloon catheter defined in claim 47, wherein said first slit is narrower than an outside diameter of the guidewire.